

CURRICULUM VITAE (Updated Aug 2023)

Professional Preparation

2003.9-2007.3	Ph.D.	Geography	University of Liverpool, Liverpool, UK
1998.9-2002.7	B.Sc.	Geography	Peking University, Beijing, China

Appointments

- 2023.2–present: Sabbatical at Coastal Carolina University and Adjunct Professor at Jiangsu Normal University, Xuzhou, China
- 2020.8–present: Associate Professor, Department of Marine Science, Coastal Carolina University, Conway, SC
- 2014.8–2020.8: Assistant Professor, Department of Marine Science, Coastal Carolina University, Conway, SC
- 2012.5–2014.8: Research Assistant Professor, Department of Earth and Environmental Sciences, Tulane University, New Orleans, LA
- 2007.4–2012.5: McWilliams Postdoctoral Research Associate, Department of Earth and Environmental Sciences, Tulane University, New Orleans, LA
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Research Interests

- Coastal Geomorphology and Geology*: rivers, delta, and clastic shorelines
- Quaternary Environmental Change*: sedimentary/geomorphic records of environmental change and anthropogenic effects on environment change
- Quaternary Geochronology*: luminescence dating with quartz and feldspar, applying luminescence dating to advance geomorphic/geologic research
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Teaching Experience

1. Sedimentation and Stratigraphy, and Lab (EENS 3270, 3271)
 2. Introduction to GIS, and Lab (EENS 3150, 3151, 6150, 6151)
 3. The Origin and Evolution of the Marine Environments, and Lab (MSCI 112, 112L, 112H)
 4. Marine Geology, and Lab (MSCI 304, 304L, 304H)
 5. Practical Experience in Marine Science (MSCI 396)
 6. Sedimentary Geology, and Lab (MSCI 316, 316L)
 7. Coastal Hazards, and Lab (MSCI 441, 441L)
 8. Coastal Marine and Wetland Processes (CMWS 601)
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Representative Publications (* for undergraduate student, ** for graduate student)

1. **Shen, Z.**, Conway, N.**, Bao, S., Muñoz, S., Lang, A., 2023, Mid-20th century land-use change greatly reduced flood intensity in the Southeastern US. *Sci. Adv.*, under review
2. Chamberlain, E.L.**, **Shen, Z.**, Kim, W., Törnqvist, T.E., McKinley, S*., and Anderson, A.*., 2021, Does load-induced shallow subsidence inhibit delta growth? *Journal of Geophysical Research – Earth Surface*, V. 126, no. 11, p. e2021JF006153.

3. **Shen, Z.**, Aeschliman, M.*, and Conway, N.**, 2021, Paleodischarge reconstruction using oxbow lake sediments compromised by shifting hydrological connectivity. *Quaternary International*, doi: <https://doi.org/10.1016/j.quaint.2021.07.004>.
4. **Shen, Z.**, Rosenheim, B. E., Tornqvist, T. E., and Lang, A., 2021. Engineered continental-scale rivers can drive changes in the carbon cycle. *AGU Advances* 2, e2020AV000273. doi: 10.1029/2020AV000273.
5. Munoz, S. E., Giosan, L., Therrell, M. D., Remo, J. W. F., **Shen, Z.**, Sullivan, R. M., Wiman, C., O'Donnell, M., and Donnelly, J. P., 2018, Climatic control of Mississippi River flood hazard amplified by river engineering: *Nature*, v. 556, p. 95-98.
6. Chamberlain, E. L.**, Törnqvist, T. E., **Shen, Z.**, Mauz, B., and Wallinga, J., 2018, Anatomy of Mississippi Delta growth and its implications for coastal restoration: *Science Advances*, v. 4, p. eaar4740.
7. **Shen, Z.**, Dawers, N. H., Törnqvist, T. E., Gasparini, N. M., Hijma, M. P., and Mauz, B., 2017, Mechanisms of late Quaternary fault throw-rate variability along the north central Gulf of Mexico coast: implications for coastal subsidence: *Basin Research*, v. 29, no. 5, p. 557-570.
8. **Shen, Z.**, Törnqvist, T.E., Mauz, B., Chamberlain, E.L.**, Nijhuis, A.N.*, Sandoval, L.*, 2015, Episodic overbank deposition as a dominant mechanism of floodplain and delta-plain aggradation. *Geology*, v. 43, p. 875-878.
9. Wolstencroft, M., **Shen, Z.**, Törnqvist, T.E., Milne, G.A., and Kulp, M., 2014, Understanding the components of basement subsidence in the Mississippi Delta: insights from geophysical modeling *Journal of Geophysical Research-Solid Earth*, v. 119, 2013JB010928.
10. **Shen, Z.**, Törnqvist, T.E., Autin, W.J., Straub, K.M., and Mauz, B., 2013, Rapid and widespread response of the Lower Mississippi River to eustatic forcing during the last glacial-interglacial cycle: Reply. *Geological Society of America Bulletin*, v. 125, p. 1375, doi: 10.1130/b30756.1.
11. **Shen, Z.** and Mauz, B., 2012, Optical dating of young deltaic deposits on a decadal time scale. *Quaternary Geochronology*, v. 10, p. 110-116.
12. **Shen, Z.**, Törnqvist, T.E., Autin, W.J., Mateo, Z.R.P., Straub, K.M. and Mauz, B., 2012, Rapid and widespread response of the Lower Mississippi River to eustatic forcing during the last glacial-interglacial cycle. *Geological Society of America Bulletin*, v. 124, p. 690-704.